

# Heated Thermal Desorption Sampling Chambers C 21

*...for sampling of volatile and semivolatile organics from large samples at elevated temperatures*

## Features

- NW Type Flange or Conflat Type Flange
- Max Sample Size: 3" diam x 1.5" high
- Other Chamber sizes available on request
- Maximum Sample Temperature - 750°C
- Requires 2 Temperature Controllers
- Requires Separate Flow Controller
- Accepts any 1/4" diameter desorption tube
- Maximum purge flow - 1000 ml/min



The Heated Thermal Desorption Sampling Chambers are used to purge volatile and semi volatile organics from large solid matrix samples at elevated temperatures and then trap these analytes on thermal desorption tubes. The samples collected are then analyzed using the thermal desorption system in conjunction with a GC and/or GC/MS. The chamber shown is 4" diameter x 4" high and can analyze samples up to 3.0" diameter x 1.5" high. These systems are custom made on order and other chamber sizes can be constructed according to your requirements.

Two models of the 4" Sample Chamber are available - Standard and High Temperature. The Standard Model is constructed using an NW type flange with a PTFE encapsulated sealing ring (max temp 250° C) and a quick disconnect clamp. The High Temperature Model is constructed using a standard Conflat flange with a copper sealing ring (maximum temperature 450° C) and the chamber is clamped using standard 1/4" diameter bolts.

The system shown contains two heaters and J type thermocouples. The system requires two temperature controllers (order separately below). The interior plate heater is used to directly heat the sample on top of this plate inside the sealed chamber. This heater can be heated up to 400° C in the standard model and up to 750°C in the high temperature model. The external heater is used to heat the sample chamber to prevent the condensation of volatiles on the surface of its walls. This heater is also used to heat the chamber to higher temperatures in order to bake it out. The maximum temperature for heating the walls is dependent on the material used to seal the two halves of the sample chamber (Standard Model is 225° C and High Temperature Model is 450° C).

The systems shown contain an adjustable internal purge gas nozzle that can be positioned or replaced with another style to suit the users needs. The purge gas can be adjusted from 0 to 1000 ml/min using a separate gas flow controller (not included).

The system is designed to accept any 1/4" diameter thermal desorption tube including 1/4" glass tubes as well as the SIS GLT thermal desorption tubes. The desorption tube is attached to the top of the chamber using the 1/4" Swagelok fitting with either PTFE or Graphitized Vespel seals.

All Sampling Chambers are custom designed and manufactured for your application.

Call with your requirements for pricing and availability.  
(908) 788-5550

**Note: The Sampling Chamber can be Modified for Other Types of Desorption Tubes.**

Part No.	Description	Price
SC400	Standard 4" TD Sampling Chamber	
SC450	High Temperat. 4" Sampling Chamber	
912000*	Temperature Controller, Model CT101	

\* Two temperature controllers required; one for the plate heater and a second for the chamber housing.

